South West Devon Waste Partnership
Councillor Update – September 2011

Dear Councillor

Following several enquiries, we have produced a short briefing note to clarify various issues relating to the proposed energy from waste (EfW) treatment solution for the sub-region. A number of erroneous and misleading claims have been made around several topics which we have outlined below. We will be able to provide more extensive information and answer any questions that you may have as part of the scheduled councillor briefing on 16 September. If you cannot attend, or for more information, do not hesitate to get in contact with us. Please contact Jenni in the partnership office on 01752 304993 or visit www.swdwp.co.uk

Recycling in Plymouth

Plymouth City Council, along with the other partner councils of Torbay and Devon, is committed to increasing recycling, not just because it is more environmentally friendly, but also for economic reasons: the cost of not recycling is increasing. The proposed facility will work alongside recycling because it will treat only the waste left over after recycling has taken place.

The partnership is committed to achieving national household waste recycling and composting targets of 45 per cent by 2015 and 50 per cent by 2020, but is predicting to achieve over 54% by 2020. It currently costs around £85-£95 per tonne to put rubbish into landfill (excluding collection and transport costs) and this is increasing significantly each year. Until at least 2013, councils also face fines of £150 a tonne if we landfill above set allowances.

Plymouth City Council is increasing its efforts by expanding existing recycling and composting services such as garden waste collection, developing new recycling initiatives such as kerbside glass collections, and promoting and supporting more recycling schemes such as battery recycling which are now available in many shops and the COBRA scheme, which recycles low energy light bulbs.

City Council staff hold regular roadshows for people to get clear information about what they can and can't recycle at home. Other initiatives include teams going door-to-door in areas which have lower recycling levels to make sure they have all the facts and equipment they need to recycle more, and officers dedicated to working with schools to help the younger generation understand the importance of reducing waste.

Schemes have also been introduced in areas which have not previously had proper recycling facilities such as high-rise flats at Marlborough House, Tamar House, Tavy House and Lynher House. In conjunction with the University, the Council has also been working to make sure our students get into good recycling habits.

These planned initiatives are, and will, increase recycling rates over time. They have been factored in alongside the new residual waste treatment solution. However, it is

important to understand that whilst we can provide opportunities to recycle, everyone needs to do their bit to make sure we get the most out of these services.

Choice of energy from waste technology with combined heat and power

It is very easy to claim there are greener, more efficient, cheaper and safer ways to dispose of our residual waste that do not include landfill or incineration, but this is not evidenced in reality and more importantly when firm contractual commitments are required.

It is both desirable and essential to increase recycling, to reduce the amount of residual waste that has to be dealt with. However there is an economical and sustainability limit to how much can be removed effectively from the waste stream through recycling - there will always be some residual waste or residues.

New technologies to deal with the residual waste are being developed, some of which will prove to be viable whilst others may not. Unfortunately, at this point in time there is no waste treatment technology that is proven to be cleaner, greener and cheaper in all respects than energy from waste, particularly where the heat is being used as per MVV's solution.

In addition, all large scale waste treatment solutions have issues and impacts for the area where they are located. For example: increased traffic; treatment processes having some environmental or community impact; and buildings which are either large and/or extend over a large area and are consequently not welcomed.

Working individually and collectively, the partner councils have very carefully and thoroughly considered the positives and negatives of the various options and solutions that are available. Without exception, on balance against the range of factors, energy from waste with combined heat and power is the most appropriate solution for the sub-region. Furthermore it is essential that a new treatment solution is secured as soon as possible as all agree that landfill is extremely environmentally damaging and is running out.

The health of Plymouth's citizens

The Health Protection Agency is the independent government body responsible for protecting the community's health and it is clear that waste incineration does not pose a health problem. It says: "Modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable" (April 2011).

Although claims have been made to link modern EfW plants with health issues, despite extensive investigation by public health authorities, academic and scientific bodies, none have been proven. It is also being claimed that there is a link between incineration and reduced life expectancy, again this is not proven.

Research by public health organisations published in a report in 2008 indicates that life expectancy across Plymouth varies with some areas of Plymouth being lower than in

other parts of the city – some 13 years between the best and worst cases. Ensuring that the communities of Plymouth are healthy is a priority for the Council and many other agencies, and it has developed a strategy to address some of the identified issues. However, there are many factors that influence life expectancy including lifestyle issues, with smoking, obesity and excessive drinking being a few of the reasons quoted in the report: (http://www.plymouthpct.nhs.uk/CorporateInformation/reportsandinquiries/Documents/Healthy%20Plymouth%20main%20web.pdf).

Before MVV's solution is granted an environment permit to operate, the Environment Agency in consultation with other statutory bodies such as the Health Protection Agency will assess the proposal. It will only grant a permit if it is assured that it will be safe and not have an unacceptable impact on the environment or health.

Proposed location of the new EfW facility

The location of the facility within Plymouth is entirely reasonable, offering many environmental and economic advantages.

The partnership tendered a contract to provide a waste solution to treat the rubbish that remains after recycling has taken place. It did not stipulate the use of a specific site, although a theoretical solution located in Plymouth was used at the start of the project to estimate a cost for a new solution. Bidding contractors were able to offer any site but had to demonstrate that their site and solution would meet the needs of the councils.

Various solutions were offered, located at several different sites in or near to Plymouth, including two sites in the Dockyard - North and South Yard. These sites have the potential to use the heat generated by incinerating the waste to connect into the existing steam network serving the Yard. Being able to use this heat makes the solution highly efficient and much more environmentally friendly. In addition, selling the heat offsets the cost of waste treatment, making it a very attractive option for both the taxpayer and the partnership. There is also potential for extending the heating network into the wider Plymouth in the future.

Being located in the Naval Base also allows electricity to be sold directly to the MOD and Babcocks which offers a better economic deal for the partnership and reduces electrical distribution losses and their energy costs and carbon footprint.

The proposed site has been previously developed and is part of the industrial setting of the Naval Base. There is good road access to the site as this is also the main entrance to the Base and the site had been identified by the MOD as an area for future development. Using the site for an EfW plant producing combined heat and power (CHP) also complies with many local and national waste planning policies.

MVV won the tender on the basis of many factors drawing on their excellent experience and safety record in order to provide a CHP solution which has rarely been achieved in the UK. It is recognised that its preferred site in North Yard is close to houses, but this is not unusual and is common across Europe where making use of the heat for housing and industry is a top priority. There are also facilities in similar situations in the UK such Sheffield and Coventry. The proposal still needs to gain

planning permission on the site and gain an environmental permit before the facility can operate.

Traffic

At present, Plymouth's residual waste goes to Chelson Meadow where it is bulked up and taken across the Tamar into Cornwall for landfilling. Much of south west Devon and Torbay's residual waste also goes to landfill at Heathfield near Newton Abbot.

In the future, most of the rubbish will be delivered via the St Budeaux bypass directly from the A38. This will include most of Plymouth's waste, apart from collections made immediately north and south of the new site, which will be delivered straight to the plant. As a result, the number of Plymouth's dust carts will not change and the only difference to their collection rounds will be that the final destination will be at North Yard, rather than Chelson Meadow.

It will however mean some additional traffic through the Camel's Head junction, and any necessary improvements to this junction are being looked at. MVV estimates that there will be 132 lorries (HGVs) travelling in and out of the plant bringing waste or removing ash from the site each Monday to Thursday with less on Friday and far fewer over the weekend. That means 264 separate lorry movements during the weekdays. Lorries movements would be spread throughout the day between 8am and 7pm from Monday to Friday, between 8am and 6pm on Saturday and bank holidays (except Christmas) and between 8am and 4pm on Sundays.

There will also be up to 35 staff vehicles driving into and out of the area each day. That means up to 70 car movements. In total the traffic increase would be less than one percent on the number of vehicles currently travelling on the nearby roads and so there should be no significant effects on nearby houses or schools.

PFI funding: how it works and why it benefits us

Private Finance Initiatives (PFI) plays an important role in the Government’s investment plans for delivering public services and essential infrastructure, primarily in health and education, but more recently in the waste sector.

It provides a way of funding major projects from the private sector without the local authority having to use or borrow money from reserves or from the Government. Typically the PFI contractor is a private company which is contracted to design, build and maintain the facilities involved and provide a service. At the end of the contract period, the facilities are usually handed over and then owned by the authority.

The main advantage of this arrangement is that the contractor takes on many of the key risks rather than the local authority, and uses its specialist knowledge and business expertise to run and maintain the facility and service. This is usually a more efficient and effective arrangement than one provided solely by the public authority, which tends to be less specialist in some areas and often has higher levels of cost and bureaucracy.

Waste treatment and management is a very specialist area which often requires large capital investment for new infrastructure. As a result, PFI contracts are usually over 25-30 years to enable the contractor to recoup their investment.

To promote the use of the PFI arrangement and transfer the risk away from the public purse, the Government introduced a PFI credit grant, which is only provided to carefully selected projects. In our case, the partnership has worked hard to secure this additional funding grant and has been awarded £95m by Defra. This grant is indexed linked and will be paid every three months over the life of the contract. This will equate to £177m, which will reduce waste disposal costs to the local tax payer. The PFI grant does not have to be repaid to Defra by the partnership and provides excellent value for money for local council charge-payers.

For our waste PFI project, the partner councils will pay an agreed price per tonne of waste delivered to the facility to cover the contractor's capital, operating and maintenance costs. The contractor is responsible for making sure that the facility provides the service, taking on all the costs of operation. The contractor will suffer financial deductions if it does not provide the contracted service to the authority.

In the case of an Energy from Waste facility, selling the electricity produced from the facility to the national grid or a private user offsets the cost of operating the facility. Likewise, selling the heat will also offset costs, if a suitable nearby customer can be found. As MVV's proposal is one of the few UK schemes to sell both electricity and heat, this helps keep the cost per tonne paid by the partner Councils down, which benefits the local taxpayer.